

mono(meth)acrylate; glycol ether (meth)acrylates such as methoxyethyl glycol mono(meth)acrylate, ethyloxyethyl glycol mono(meth)acrylate, butyloxyethyl glycol mono(meth)acrylate or phenoxyethyl glycol mono(meth)acrylate; glycidyl acrylate or glycidyl methacrylate; or amino (meth)acrylates such as 2-aminoethyl (meth)acrylate.

Further suitable comonomers include free-radically copolymerizable monomers such as styrene, 1-methylstyrene, 4-tert-butylstyrene or 2-chlorostyrene; vinyl esters of fatty acids having from 2 to 20 carbon atoms, such as vinyl acetate or vinyl propionate; vinyl ethers of alkanols having from 2 to 20 carbon atoms, such as vinyl isobutyl ether; vinyl chloride or vinylidene chloride; vinyl alkyl ketones; dienes such as butadiene or isoprene; and esters of maleic and crotonic acid. Further suitable comonomers include cyclic vinyl compounds such as vinylpyridine, 2-methyl-1-vinylimidazole, 1-vinylimidazole, 5-vinylpyrrolidone or N-vinylpyrrolidone. It is also possible to use comonomers containing allylic unsaturation, such as allyl alcohol, allyl alkyl esters, monoallyl phthalate or allyl phthalate, for example. Also suitable, furthermore, are acrolein and methacrolein and polymerizable isocyanates.

Of particular importance are the comonomers which contain particularly readily abstractable hydrogen atoms, in particular comonomers containing the following groups: isoalkyl groups having from 3 to 12 carbon atoms such as isopropyl, isobutyl or ethylhexyl groups; aminoisoalkyl groups having from 3 to 12 carbon atoms such as diisopropylaminoethyl or N-isobutyl-isopropylaminoalkyl groups; cycloisoalkyl groups having from 5 to 8 carbon atoms such as methylcyclohexyl, 10 isopropylcyclohexyl, cycloalkyl, furfuryl, tetrahydro-furfuryl, p-menthyl, terpine and thymol groups. Also particularly suitable are isobornyl acrylate, isobornyl methacrylate, isobornyl ethacrylate, isobornyl cinnamate, adamantane acrylate, adamantane meth-15 acrylate, adamantane ethacrylate and also adamantane cinnamate in the various isomeric forms. Fractions of these comonomers increase the photosensitivity of the polymers.

20 Comonomers which carry further functional groups in addition to the double bond may be used for an additional thermally activatable crosslinking reaction and if so used are present in fractions of from 1 to 60% by weight of the comonomer mixtures. In general, 25 however, they are used in minor amounts in which they improve, for example, the adhesion, the electrostatic chargeability, the rheology of the coating compositions

of the invention, and the surface smoothness of the coatings of the invention. As incorporated stabilizers, furthermore, derivatives of 3-phenylacrylic acid improve the weathering stability of the coatings of the
5 invention, especially the surface coatings.

Maleic anhydride is copolymerizable in fractions with (meth)acrylates and styrene; the corresponding copolymers undergo addition with water and dicyclo-
10 pentadiene. These adducts are likewise suitable as polyacrylates (A).

Further polymers (A), especially polyethers, are in general terms obtained by polymer-analogous reaction of
15 functional polymers with compounds which contain structural units I and/or II and/or photoinitiators and which are able to react with the functional groups of the polymers.

20 Compounds containing the structural units V and/or VI are obtained by way of the known addition reaction of dicyclopentadiene (DCPD) and water with anhydrides of dicarboxylic or tetracarboxylic acids, with particular preference maleic anhydride. In this case the acidity
25 of the carboxyl groups, which following the addition of one mol of DCPD per anhydride of the ester group are adjacent, is lessened to such an extent that attempts